

AMENDMENTS TO THE CLAIMS

Please amend the claims to read as follows:

1. (Currently Amended) A method for a computing device to lock onto a data channel, the method comprising:

storing in a memory instructions for comparing a predetermined criterion to interim operational data, said data resulting from an a channel locking procedure to lock onto an incoming channel;

when a signal is detected on an incoming channel, initiating a channel locking procedure on [[an]] said incoming channel by a broadband demodulator;

applying—a comparing said predetermined criterion to said interim operational data based on said instructions stored in said memory, said data resulting from an act of said channel locking procedure to lock onto said incoming channel; and

if said predetermined criterion matches said interim operational data, determining whether to continue continuing locking onto said incoming channel, based on a result of said applying said predetermined criterion; and

if said predetermined criterion does not match said interim operational data, not continuing locking onto said incoming channel.

2. (Original) The method of claim 1, wherein said act of said channel locking procedure is to determine a symbol rate of an incoming channel.

3. (Original) The method of claim 1, wherein said act of said channel locking procedure is to determine a signal type of an incoming channel.

4. (Currently Amended) The method of claim 1, wherein applying comparing said criterion comprises determining from said interim data whether a symbol rate of a channel matches a symbol rate required by said broadband demodulator.

5. (Currently Amended) The method of claim 1, wherein applying comparing said criterion comprises determining from said interim data whether a signal symbol spectrum picture of a channel matches a signal spectrum picture required by said broadband demodulator.

6. (Currently Amended) The method of claim 1, wherein the determining whether to continue said channel locking procedure comparing a predetermined criterion to interim operational data includes using one or more selected Quadrature Amplitude Modulation checks.

7. (Currently Amended) The method of claim 1, further comprising initiating at least one channel locking procedure retry before not to continue locking onto said incoming channel.

8. (Original) The method of claim 7, further comprising counting a number of channel locking procedure retries.

9. (Original) The method of claim 8, wherein if said number of channel locking attempts is less than a pre-selected threshold, initiating a retry command.

10. (Original) The method of claim 8, wherein if said number of channel locking attempts is greater than a selected threshold, initiating a channel locking procedure using an alternative frequency.

11. (Currently Amended) The method of claim 1, further comprising completing said channel lock procedure if said predetermined criterion for continuing said channel lock procedure has been met.

12. (Currently Amended) An apparatus for locking onto a data channel, the apparatus comprising:

a memory to store instructions for comparing a predetermined criterion to interim operational data, said data resulting from the apparatus performing a channel locking procedure to lock onto an incoming channel; and

a broadband demodulator to perform initiate a channel locking procedure on an incoming channel when a signal is detected on said incoming channel, said demodulator having a channel lock sensing mechanism to determine whether to continue locking onto said incoming channel [[by]] based on a result of applying a comparing said predetermined criterion to said interim channel locking data according to said instructions stored in said memory, said data resulting from an act of said channel locking procedure wherein:

if said predetermined criterion matches said interim operational data, continuing locking onto said incoming channel, and

if said predetermined criterion does not match said interim operational data, not continuing locking onto said incoming channel.

13. (Original) The apparatus of claim 12, wherein a controller manages operation of said lock sensing mechanism.

14. (Original) The apparatus of claim 12, further comprising a memory to store instructions to enable operation of said lock sense mechanism.

15. (Currently Amended) A cable modem device for locking onto a data channel, the device comprising:

a memory to store instructions for comparing a predetermined criterion to interim operational data, said data resulting from a channel locking procedure to lock onto an incoming channel; and

a controller to determine whether to continue locking onto an incoming channel based on a result of applying a comparing said predetermined criterion to said interim operational data according to said instructions stored in said memory, said data resulting from an act of said channel locking procedure wherein

if said predetermined criterion matches said interim operational data, continuing locking onto said incoming channel, and

if said predetermined criterion does not match said interim operational data, not continuing locking onto said incoming channel; and

a demodulator to demodulate a signal received over said incoming channel.

16. (Original) The device of claim 15, wherein said controller determines from said interim data of said channel-locking procedure whether a symbol rate of a channel matches a symbol rate required by the cable modem device.

17. (Original) The device of claim 15, wherein said controller determines from said interim data of said channel-locking procedure whether a signal spectrum picture of a channel matches a signal spectrum picture required by the cable modem device.

18. (Currently Amended) An article comprising a storage medium having stored thereon instructions for locking onto a data channel, the instructoins, [[that]] when executed by a processing platform, result resulting in performing initiating a channel locking procedure to lock on an incoming channel by a broadband demodulator when a signal is detected on said incoming channel; applying comparing a predetermined criterion to interim channel locking data, said interim operational data and said predetermined criterion stored a memory unit, said interim operational data resulting from an act of said channel-locking procedure, and determining whether to continue locking onto said incoming channel, based on a result of said applying said predetermined criterion and wherein executing said instructions results in:

if said predetermined criterion matches said interim operational data,
continuing locking onto said incoming channel,

and if said predetermined criterion does not match said interim operational
data, not continuing locking onto said incoming channel.

19. (Currently Amended) The article of claim 18, wherein applying comparing said criterion comprises determining whether a symbol rate of a channel matches a symbol rate required by a broadband demodulator.

20. (Currently Amended) The article of claim 18, wherein applying comparing said criterion comprises determining whether a signal symbol spectrum picture of a channel matches a signal spectrum picture required by a broadband demodulator.

21. (Currently Amended) The article of claim 18, wherein the instructions further result in completing said channel lock procedure if said predetermined criterion has been met.

22. (Currently Amended) A cable network communication comprising:

a cable modem termination system to broadcast signals; and

a cable modem having:

a memory to store instructions for comparing a predetermined criterion to interim
operational data, said data resulting from an act of a channel locking procedure to lock
onto an incoming channel of said cable modem termination system; and

a demodulator adapted to screen broadcast signals broadcast by said cable modem
termination system and detected during a channel locking procedure on [[an]] said
incoming channel by applying a comparing said predetermined criterion to said interim
operational data based on said instructions stored in said memory, said data resulting from
an act of said channel locking procedure to lock onto said incoming channel, and
determining whether to screen a broadcast signal, based on a result of said applying said
predetermined criterion wherein if said predetermined criterion matches said interim
operational data, said demodulator is to continue locking onto said incoming channel, and
if said predetermined criterion does not match said interim operational data, said
demodulator is to not continue locking onto said incoming channel.

23. (Original) The cable network communication system of claim 22, wherein said cable modem comprises a controller to execute instructions to screen said broadcast signals during said channel locking procedure.

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24. (Original) The cable network communication system of claim 22, wherein said cable modem comprises a memory unit to store instructions to screen said broadcast signals during said channel locking procedure.

25. (Original) The cable network communication system of claim 22, wherein said cable modem rejects unwanted broadcast signals before said locking procedure is completed.